

REMARKS

Claim Objections.

2. The Office Action states that "Claims 3, 13, and 23 as well as 19-20 and 29-30 are objected to for the following informalities: It is suggested that the phrase "the client" appearing in claims 19-20 and 29-30 should [be] deleted and replaced with the phrase —the distribution point—. It is suggested that the phrase "the loop" appearing in claims 3, 13, and 23 be deleted and replaced with the phrase —a loop— to improve the clarity of the claims. Appropriate correction is required."

Applicant has amended Claims 3, 13, and 23 to depend from Claims 2, 12, and 22 respectively, wherein "the loop" provides proper antecedent terminology for the claims.

Applicant has amended independent Claims 1, 11, and 21, to more particularly point out and refer to the client terminal. Applicant has also amended dependent Claims 9, 10, 19, 20, 29, and 30 to properly refer to the client terminal. Support is seen in the Application as filed, at least on page 7, lines 17-23, and in Figure 1.

Applicant submits that the Claims, as amended, overcome the objections.

3. The Office Action states that "Claims 7-8, 16, and 22-26 are objected to because of the following informalities:

It is suggested that claims 7-8 should depend from claim 6 instead of claim 5, as claim 5 has no recitation of metadata.

It is suggested that claim 16 should depend from claim 11 instead of claim 1.

It is suggested that claims 22-26 should depend from claim 21 instead of claim 1, as claim 1 has no recitation of a system.

The examiner, for purposes of prior art rejections will be evaluating the claims as having the dependencies suggested above.

Appropriate correction is required.”

Applicant has amended Claims 7-8, 16, and 22, and 24-26, as suggested by the Examiner. Applicant has amended Claim 23, to properly depend from Claim 22. Applicant submits that Claims 7-8, 16, and 22-26, overcome the objections.

35 USC §112 Claim Rejections.

5. The Office Action states that “Claims 3, 13, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.”

The Office Action stated that the “phrase “DMCA compliant” appearing in claims 3, 13, and 23 is unclear and indefinite because there is no suggestion in the claim, or in the specification what makes a loop “DMCA compliant”. Additionally, the Examiner suggests in claim 3 that Digital Millennium Copyright Act be written out fully with DCMA in parenthesis to further clarify the claim. The Examiner will interpret “DMCA compliant” in these claims for the purposes of analysis under prior art to mean that there is some form of digital rights management (DRM) to protect a content owner’s content.”

Applicant has amended Claims 3, 13, and 23, to claim wherein the loop is compliant to a standard. Support is seen in the Application as filed, at least on page 7, lines 29-31.

Applicant submits that Claims 3, 13, and 23, as amended, overcome the rejections under 35 U.S.C. 112, second paragraph.

35 USC §102 Claim Rejections.

7. The Office Action states that "Claims 1-2, 9, 11-12, 19, 21-22, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lambert (US 2002/0091761)."

Regarding Claims 1, 11, and 21, the Office Action states that "Lambert discloses: receiving a schedule for content delivery; ([0043] discloses the identification of a list of channels (i.e. receiving a schedule of channels that can be delivered)

receiving a plurality of content; ([0043] each channel/stream is received) constructing a stream of the content based on the schedule; and transmitting the stream of content to at least one client. ([0047 discloses that each segment of the schedule of channels is streamed to the client, creating a new stream based off the listing of channels discovered.])"

Applicant disagrees that Claim 1, 11, and 21 are anticipated by Lambert.

Hilton Davis / Festo Statement

Applicant has amended Claim 1, 11 and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Applicant has amended Claim 1, to claim a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

locally caching the fetched content;

concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 11, to claim a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- storing the fetched content to a local disk;

- copying the stored fetched content to the memory cache;

- concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations;
- and

- delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 21, to claim a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

- means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

- a local disk associated with the system for storing the content;

- means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

- means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

- a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Support is seen in the Application as filed, at least on page 5, lines 13-18; on page 8, lines 11-21; on page 9, lines 10-11; on page 10, line 21 to page 11, line 4; on page 11, lines 6-8; on page 11, line 29 to page 12, line 18; on page 12, line 25 to page 13, line 8; on page 13, line 16 to page 14, line 31; and in Figures 1, 3-6 and 9-12.

Applicant submits that Claims 1, 11, and 21, as amended and as discussed below, overcome the rejections under 35 U.S.C. §102(e) as being unpatentable over Lambert.

Lambert describes a technique of generating a composite media stream, as seen at least in the abstract, wherein:

"The present invention discloses a method, apparatus, and article of manufacture for providing information. According to one embodiment of the present invention, at least two data segments are collected. Each data segment is collected from a media stream, and each media stream is located at a different media source. Then, a composite media stream is generated by joining together each of the collected data segments. In another embodiment, the data segment is an audio data segment. The above-described invention has utility for allowing a user/listener to search for an Internet radio station by listening to a composite media stream."

Lambert then describes details of tuning a media player to an Internet radio station, as seen at least in [0043], wherein:

"[0043] The controller 302 identifies the number of server media players 308, 310, 312, 314, 316, and 318. The number of server media players is represented herein by the variable N. For media player 1 308, the controller 302 fetches an identification tag from the database 306. Based on the information contained in the tag, the controller 302 tunes media player 1 308 to the Internet radio station identified in the tag. Accordingly, each tag is associated with a different Internet radio station. The controller 302 then receives media player 1 308's media stream. This media stream may be live or archived."

Applicant submits that, while a controller 302 as described by Lambert receives a media player's media stream, Lambert does not periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate such cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant therefore submits that, while Lambert describes that a controller 302 receives a media stream, there is no disclosure or suggestion, express or implied, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

- concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant also submits that, while Lambert describes that a controller 302 receives a media stream, there is no disclosure or suggestion, express or implied, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- storing the fetched content to a local disk;

- copying the stored fetched content to the memory cache;

- concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

- delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Furthermore, In regard to Claim 21, as amended, Applicant submits that, while Lambert describes that a controller 302 receives a media stream, there is no disclosure or suggestion, express or implied, of "a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

- means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

- a local disk associated with the system for storing the content;

- means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 22, as amended, overcome the rejection under 35 U.S.C. 102(e) as being anticipated by Lambert (US 2002/0091761).

The Examiner bears the burden of establishing a *prima facie* case of anticipation (In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986)). The prior art reference must disclose each element of the claimed invention, as correctly interpreted, and as arranged in the claim (Lindermann Maschnefabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim (MPEP 2131).

As claims 2-10 depend from amended independent Claim 1, as claims 12-20 depend from amended independent Claim 11, and as dependent claims 22-30 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

8. The Office Action states that "Claims 1, 3-5, 9-11, 13-15, 19-21, 23-25 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by [Klemets] et al. (US 2003/0236906), hereinafter [Klemets]."

Regarding Claims 1, 11, and 21, the Office Action states that "[Klemets] discloses:

receiving a schedule for content delivery; ([0074] discloses the player receiving a list of multiple pieces of content)

receiving a plurality of content; ([0074] discloses the multiple pieces of content being received by the player)

constructing a stream of the content based on the schedule; and

transmitting the stream of content to at least one client. ([0074] discloses streaming the cached content to a user upon demand or at a prescheduled time.)"

Applicant disagrees that Claim 1, 11, and 21 are anticipated by Klemets.

Hilton Davis / Festo Statement

Applicant has amended Claim 1, 11 and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Klemets describes Client-side caching of streaming media content, as seen at least in the Abstract, wherein:

"Various functionality with respect to streaming media content is made available to users. Such functionality includes one or more of: streaming media content at a rate independent of the encoded bit rate of the content, allowing streaming of content to continue even when the user has selected various shuttle control options (e.g., pause, stop, fast forward, seek, rewind, etc.), allowing streaming content to be recorded for playback at a later time, and allowing streaming content to be time-shifted."

Klemets describes further details of client side caching, as seen at least in Fig. 2 and in [0074], wherein:

"Caching streaming media content further allows content to be recorded for playback at a later time. At least a portion of the content may be played back for the user while the content is being streamed and cached, or alternatively none of the content may be played back until a later time (e.g., sometime after caching of the content has been completed). For example, a user may input to streaming media player 142 a request to cache multiple pieces of streaming media content, and then playback those pieces at a later time (e.g., later that day, the next day, the next week, the next month, etc.). Such a request may be, for example, a specific "cache content" request, or alternatively simply a play request. When streaming media player 142 receives such a request, it communicates with streaming module 144 and has the requested content streamed in the same manner as if streaming media player 142 were playing back the content for the user. However, when the content is received at client device 102, streaming media player 142 caches the content to nonvolatile storage device 150 and does not (unless requested by the user) play back the content at the current time. When the user subsequently requests playback of the content, streaming media player 142 obtains the content from the cache (assuming the content has not expired or, if the content has expired then assuming the content has not been changed)."

Applicant submits that, while Klemets describes the caching of content by a streaming media player 142 at a client device 102, Klemets does not periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenates the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant therefore submits that, while Klemets describes the caching of content by a streaming media player 142 at a client device 102, there is no disclosure or suggestion, express or implied, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

- concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

- transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant also submits that, Klemets describes the caching of content by a streaming media player 142 at a client device 102, there is no disclosure or suggestion, express or implied, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- storing the fetched content to a local disk;

- copying the stored fetched content to the memory cache;

- concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal.”

Furthermore, In regard to Claim 21, as amended, Applicant submits that, while Klemets describes the caching of content by a streaming media player 142 at a client device 102, there is no disclosure or suggestion, express or implied, of “a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

- means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

- a local disk associated with the system for storing the content;

- means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

- means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

- a memory cache for copying the stored and retrieved content;

- means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

- means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal.”

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 22, as amended, overcome the rejection under 35 U.S.C. 102(e) as being anticipated by Klemets et al. (US 2003/0236906).

The Examiner bears the burden of establishing a *prima facie* case of anticipation (In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986)). The prior art reference must disclose each element of the claimed invention, as correctly interpreted, and as arranged in the claim (Lindermann Maschnefabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485

(Fed. Cir. 1984)). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim (MPEP 2131).

As claims 3-5 and 9-10 depend from amended independent Claim 1, as claims 13-15 and 19-20 depend from amended independent Claim 11, and as dependent claims 23-25 and 29-30 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

35 USC §103 Claim Rejections.

10. The Office Action states that "Claims 2, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets as applied to claims 1, 11, and 21 above, in further in view of Hose at al. (US 2003/0048418)" hereinafter Hose.

Hilton Davis / Festo Statement

As discussed above and below, Applicant has amended Claims 1, 11, and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Applicant has amended Claim 1, to claim a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 11, to claim a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 21, to claim a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

a local disk associated with the system for storing the content;

means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Support is seen in the Application as filed, at least on page 5, lines 13-18; on page 8, lines 11-21; on page 9, lines 10-11; on page 10, line 21 to page 11, line 4; on page 11, lines 6-8; on page 11, line 29 to page 12, line 18; on page 12, line 25 to page 13, line 8; on page 13, line 16 to page 14, line 31; and in Figures 1, 3-6 and 9-12.

Hose describe presentation scheduling in a digital cinema system, as seen at least in the Abstract, wherein:

"Embodiments disclosed allow assigning programs for presentation in a digital cinema system. In one embodiment, a scheduler 180 is implemented to generate a schedule in accordance to which decoding modules 140 control playback of data for presentation in the digital cinema systems. The decoding module 140 may operate in an automatic mode and/or manual mode. In automatic mode, the decoding module 140 controls playback based on the schedule, without user intervention. In manual mode, the decoding module 140 cues the user at the appropriate times to control playback based on the schedule."

Applicant submits that, while Klemets describes the caching of content by a streaming media player 142 at a client device 102, neither Klemets nor Hose periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate the cached

content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Hose, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

- concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

- transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Hose, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- storing the fetched content to a local disk;

- copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal.”

In regard to Claim 21, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Hose, of “a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

a local disk associated with the system for storing the content;

means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal.”

Applicant respectfully submits that, even in combination, Klemets and Hose fail to meet Claims 1, 11, and 21, as amended. As well, it would take significant modification and undue experimentation to meet Claims 1, 11, and 21, as amended, based on any of Klemets and/or Hose.

Therefore, the *prima facie* obviousness case is incomplete because Klemets and Hose fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To

support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 21, as amended, overcomes the rejection under 35 U.S.C. §103(a) as being unpatentable over Klemets in view of Hose.

As claim 2 depends from amended independent Claim 1, as claim 12 depends from amended independent Claim 11, and as dependent claims 22 depends from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

11. The Office Action states that "Claims 6-7, 16-17, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets as applied to claims 1, 11, and 21 above, in further in view of Addington (US 2003/0028893)."

Hilton Davis / Festo Statement

As discussed above and below, Applicant has amended Claims 1, 11, and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Applicant has amended Claim 1, to claim a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

locally caching the fetched content;

concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 11, to claim a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Applicant has amended Claim 21, to claim a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

a local disk associated with the system for storing the content;

means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal.

Support is seen in the Application as filed, at least on page 5, lines 13-18; on page 8, lines 11-21; on page 9, lines 10-11; on page 10, line 21 to page 11, line 4; on page 11, lines 6-8; on page 11, line 29 to page 12, line 18; on page 12, line 25 to page 13, line 8; on page 13, line 16 to page 14, line 31; and in Figures 1, 3-6 and 9-12.

Addington describes a system and method for distributing network-based personal video, as seen at least in the Abstract, wherein:

"A personal video service manager can store one or more personal video assets on a server. A personal video asset can comprise a recording of a broadcast stream of a broadcast asset or an asset that has been pre-authored in a personal video asset format. Upon receiving a request from a subscriber to receive the personal video asset, the personal video service manager can facilitate a connection between the server and the subscriber for distributing the personal video asset from the server to the subscriber."

Applicant submits that, while Klemets describes the caching of content by a streaming media player 142 at a client device 102, neither Klemets nor Addington periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Addington, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

- concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

- transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Addington, of "a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 21, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Addington, of "a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

a local disk associated with the system for storing the content;

means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Applicant respectfully submits that, even in combination, Klemets and Addington fail to meet Claims 1, 11, and 21, as amended. As well, it would take significant

modification and undue experimentation to meet Claims 1, 11, and 21, as amended, based on any of Klemets and/or Addington.

Therefore, the *prima facie* obviousness case is incomplete because Klemets and Addington fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 21, as amended, overcomes the rejection under 35 U.S.C. §103(a) as being unpatentable over Klemets in view of Addington.

As claims 6-7 depend from amended independent Claim 1, as claims 16-17 depend from amended independent Claim 11, and as dependent claims 26-27 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

12. The Office Action states that "Claims 6-7, 16-17, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambert as applied to claims 1, 11, and 21 above, in further in view of Addington (US 2003/0028893)."

Hilton Davis / Festo Statement

As discussed above and below, Applicant has amended Claims 1, 11, and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

As discussed above, Addington describes a system and method for distributing network-based personal video, as seen at least in the Abstract, wherein:

“A personal video service manager can store one or more personal video assets on a server. A personal video asset can comprise a recording of a broadcast stream of a broadcast asset or an asset that has been pre-authored in a personal video asset format. Upon receiving a request from a subscriber to receive the personal video asset, the personal video service manager can facilitate a connection between the server and the subscriber for distributing the personal video asset from the server to the subscriber.”

Applicant submits that, while Lambert describes that a controller 302 receives a media player's media stream, neither Lambert nor Addington periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Addington, of “a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

locally caching the fetched content;

concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Addington, of "a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 21, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Addington, of "a stream source content delivery system for retrieving playlists and content, and for

delivering streams of the content based on the playlists to at least one distribution point, comprising:

- means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

- a local disk associated with the system for storing the content;

- means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

- means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

- a memory cache for copying the stored and retrieved content;

- means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

- means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Applicant respectfully submits that, even in combination, Lambert and Addington fail to meet Claims 1, 11, and 21, as amended. As well, it would take significant modification and undue experimentation to meet Claims 1, 11, and 21, as amended, based on any of Lambert and/or Addington.

Therefore, the *prima facie* obviousness case is incomplete because Lambert and Addington fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this

analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 21, as amended, overcomes the rejection under 35 U.S.C. §103(a) as being unpatentable over Lambert in view of Addington.

As claims 6-7 depend from amended independent Claim 1, as claims 16-17 depend from amended independent Claim 11, and as dependent claims 26-27 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

13. The Office Action states that "Claims 6, 8, 16, 18, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambert as applied to claims 1, 11, and 21 above, in further in view of Costello et al. (US 6609091) hereinafter Costello."

Hilton Davis / Festo Statement

As discussed above and below, Applicant has amended Claims 1, 11, and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

Costello describe a broadcast program capture and playback enhancement signal structure, receiver, and method, as seen at least in the Abstract, wherein:

"In a local storage and playback broadcast system, multiple copies of one or more processing parameters used in individual receivers for the local storage and playback are broadcast. In some embodiments each processing parameter is associated with each packet in the program so that a copy of each parameter is broadcast with each packet. In some

embodiments the program is divided into segments, each segment having a header, and a copy of the parameter is broadcast in each segment header.”

Applicant submits that, while Lambert describes that a controller 302 receives a media stream, neither Lambert nor Costello periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Costello, of “a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

- analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

- fetching content that needs to be retrieved for each of the retrieved playlists;

- locally caching the fetched content;

- concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

- transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal.”

In regard to Claim 11, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Costello, of “a process for producing and delivering streams of content, comprising the steps of:

- periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 21, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Lambert or Costello, of "a stream source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

a local disk associated with the system for storing the content;

means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

a memory cache for copying the stored and retrieved content;

means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Applicant therefore respectfully submits that, even in combination, Lambert and Costello fail to meet Claims 1, 11, and 21, as amended. As well, it would take significant modification and undue experimentation to meet Claims 1, 11, and 21, as amended, based on any of Lambert and/or Costello.

Therefore, the *prima facie* obviousness case is incomplete because Lambert and Costello fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 21, as amended, overcomes the rejection under 35 U.S.C. §103(a) as being unpatentable over Lambert in view of Costello.

As claims 6 and 8 depend from amended independent Claim 1, as claims 16 and 18 depend from amended independent Claim 11, and as dependent claims 26 and 28 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

14. The Office Action states that "Claims 6, 8, 16, 18, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemets as applied to claims 1, 11, and 21 above, in further in view of Costello et al. (US 6609091) hereinafter Costello."

Hilton Davis / Festo Statement

As discussed above and below, Applicant has amended Claims 1, 11, and 21, for convenience in prosecution, and reserves the right to present the same or similar claims in a related Application. The amendments herein were not made for any reason related to patentability.

As discussed above, Costello describe a broadcast program capture and playback enhancement signal structure, receiver, and method, as seen at least in the Abstract, wherein:

"In a local storage and playback broadcast system, multiple copies of one or more processing parameters used in individual receivers for the local storage and playback are broadcast. In some embodiments each processing parameter is associated with each packet in the program so that a copy of each parameter is broadcast with each packet. In some embodiments the program is divided into segments, each segment having a header, and a copy of the parameter is broadcast in each segment header."

Applicant submits that, while Klemets describe the caching of content by a streaming media player 142 at a client device 102, neither Klemets nor Costello periodically retrieve playlists from a database for content delivery for each station that a system serves; analyze the playlists to determine content that is already locally cached, and content that needs to be retrieved; fetch content that needs to be retrieved for each of the retrieved playlists; and/or concatenate the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations.

In regard to Claim 1, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Costello, of "a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

locally caching the fetched content;

concatenating the cached content into a stream for each of the stations, based on the retrieved playlist for each of the stations; and

transmitting the streams of the content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 11, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Costello, of "a process for producing and delivering streams of content, comprising the steps of:

periodically retrieving a playlist from a database for content delivery for each station that a system serves;

analyzing each of the retrieved playlists to determine content that is already locally cached in a memory cache, and content that needs to be retrieved;

fetching content that needs to be retrieved for each of the retrieved playlists;

storing the fetched content to a local disk;

copying the stored fetched content to the memory cache;

concatenating the cached content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

In regard to Claim 21, as amended, Applicant submits that there is no disclosure or suggestion, express or implied, in any of Klemets or Costello, of "a stream

source content delivery system for retrieving playlists and content, and for delivering streams of the content based on the playlists to at least one distribution point, comprising:

- means for periodically retrieving a playlist from a database for content delivery for each station that the system serves;

- a local disk associated with the system for storing the content;

- means for analyzing each of the retrieved playlists to determine content that is already locally stored, and content that needs to be retrieved;

- means for periodically fetching content that needs to be retrieved for each of the retrieved playlists;

- a memory cache for copying the stored and retrieved content;

- means for concatenating the content from the memory cache into a stream for each of the stations based on the retrieved playlist for each of the stations; and

- means for delivering the streams of content to at least one distribution point for relaying to at least one client terminal."

Applicant respectfully submits that, even in combination, Klemets and Costello fail to meet Claims 1, 11, and 21, as amended. As well, it would take significant modification and undue experimentation to meet Claims 1, 11, and 21, as amended, based on any of Klemets and/or Costello.

Therefore, the *prima facie* obviousness case is incomplete because Klemets and Costello fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)). As well, the Examiner should "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this

analysis should be made explicit (*KSR Int'l Co., v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007)).

Applicant therefore submits that independent Claim 1, Claim 11, and Claim 21, as amended, overcomes the rejection under 35 U.S.C. §103(a) as being unpatentable over Klemets in view of Costello.

As claims 6 and 8 depend from amended independent Claim 1, as claims 16 and 18 depend from amended independent Claim 11, and as dependent claims 26 and 28 depend from amended independent Claim 21, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

Other Amendments.

Applicant has amended Claims 1, 12, and 22, to correct minor spelling errors. The Applicant has also amended the Specification, to correct grammatical errors.

Amendments to the Specification

On page 5, lines 13-24 of the Application, please replace the paragraph with the following paragraph, as amended:

The stream sourcing content delivery system goes to a database and builds a physical stream, based on a schedule. The stream source content delivery system works at a station ID (SID), finds the order of the delivery of content for the station based upon the schedule, and downloads a plurality of music files, e.g. 6 hours of music, to its hard drive to enable play back. The system then concatenates the files, to create a stream, and awaits the request of one or more stream recipients. Some preferred system embodiments further comprise a fail-safe mode, whereby a loop of music is generated from the downloaded stream, and is delivered to one or more users when further access to content is interrupted, such that recipients experience an uninterrupted delivery of a plurality of files, e.g. songs. A stream source content delivery system provides flexibility and scalability for a large ~~large~~ number of stations, e.g. up to 100 stations, and/or listeners.

On page 12, line 29 to page 13, line 2 of the Application, please replace the paragraph with the following paragraph, as amended:

Playlist Management. Figure 4 is a flowchart of periodic playlist management 90 within the stream sourcing content delivery system 12, which illustrates normal operation for fetching new tracks. Under normal operation, the stream sourcing content delivery system 12 queries 94 the database 14 ~~and see~~ and sees if there are new tracks for the playlist for the given SID. The system 12 asks the database 14 if there are new tracks scheduled since the last time the stream sourcing content delivery system 12 retrieved this information (using a time and ID). If the determination is positive 96, *i.e.* there are new items, the stream sourcing content delivery system adds 98 the information for each item to

the playlist 18, and returns 100 to the determination step 94. If the determination is negative 102, *i.e.* there are no new items, the periodic playlist management process 90 proceeds 104 to the next station ID 30, queries the database 14 for the playlist 18 of the next station ID 30, and then determines 94 if there are new tracks for the playlist 18 for the next SID 30.

On page 15, lines 8-10 of the Application, please replace the paragraph with the following paragraph, as amended:

Stream Management. Figure 7 is a schematic diagram of content stream management within a stream sourcing content delivery system 12. The stream sourcing content delivery stream management functions ~~similarly to~~ similarly to a "producer consumer" model.

On page 20, lines 1-3 of the Application, please replace the paragraph with the following paragraph, as amended:

Preferred embodiments of the stream sourcing content delivery system 12 send ~~sends~~ content, on a per file basis, at a bit rate which matches the actual bit rate of reception and use, which avoids either over run or under run of data transfer.

CONCLUSION

Applicant submits that the claims in the present application are directed to statutory subject matter. Applicant submits that this amendment does not introduce new matter into the Application. Based on the foregoing, Applicant considers the invention to be in condition for allowance. Applicant earnestly solicits the Examiner's withdrawal of the rejection set forth in the prior Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States Patent.

Respectfully Submitted,



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